

Amendments to the Drawings:

Please substitute the attached 6 replacement sheets (Figures 1 through 6) of drawings for the 6 sheets of drawings containing Figures 1 through 6 originally filed with this Application

With these drawings Figures 1-6 have been amended. In the replacement sheets the overall quality of the drawings has been improved, and appended to this amendment are annotated copies of the previous drawing sheets marked to show the other amendments presented in the replacement sheets of drawings. The specific changes made to the drawings shown in the attached annotated drawing sheets are as follows.

In FIG. 1, an instance of reference numeral 30 is changed to reference numeral 40, and reference numeral 26 and associate lead line are deleted.

In FIG. 3, an instance of reference numeral 30 is changed to reference numeral 33, reference numeral 32 is changed to reference numeral 31, and the lead line for reference numeral 30 is changed to an arrow lead line.

In FIG. 6, the area labeled "A" and "CS," the labels "A" and "CS" and associated lead lines have been formalized.

In FIGS. 1-6, the actuators between "riser portion 30" and "boom portion 40" have been relabeled with numeral 27, the telescoping actuator for "boom portion 40" has been relabeled with numeral 24, the actuators between "boom portion 40" and "jib portion 50" have been relabeled with numeral 28, and the telescoping actuator for "jib portion 50" has been relabeled with numeral 23.

REMARKS

This reply is intended to be completely responsive to the Non-Final Office Action dated November 2, 2009.

Status

Claims 1-19 are pending in the application.

Claims 1-19 are rejected under 35 U.S.C. § 112, but on page 7 of the Office Action, the Examiner indicates that the claims 1-9 would be allowable if the rejections under 35 U.S.C. § 112 are corrected. Because it is the Applicants understanding that independent claims 1 and 10 are both patentable over the prior art, the Applicants understand that the Examiner intended to indicate that claims 1-19 (not only claims 1-9) would be allowable if the rejections under 35 U.S.C. § 112 were corrected.

Claims 10 and 12-14 are currently being amended.

The Applicants believe that each of the rejections and objections raised by the Examiner have been addressed and the application is in condition for allowance. Reconsideration and allowance of the application, as amended, is respectfully requested.

Objections to Drawings

On pages 2 and 3 of the Office Action, the Examiner has objected to the drawings for various reasons. As discussed below, the Applicants have addressed each of the objections identified by the Examiner. For the reasons discussed below, the Applicants respectfully request withdrawal of the objections to the drawings.

I. Drawing Objection Based on Double Use of Numeral 30 in FIG. 1

On page 2 of the Office Action, the Examiner has objected to the drawings as failing to comply with 37 C.F.R. § 1.84(p)(4) stating that reference characters “40” and “30 have both been used to designate a boom, the mislabeling is in figure 1. As shown in the attached replacement drawings, the Applicants have relabeled the boom with reference numeral 40 in FIG. 1.

II. Drawing Objection Based on Reference Numerals 7 and 8

On page 2 of the Office Action, the Examiner objected to the drawings stating “there is also wheels shown in the drawings that are labeled both (7) and (8).” The Applicants respectfully traverse this ground for objection. According to the Applicants’ specification, the figures “illustrates a weight bearing element 7 as being a wheel 8.” Paragraph [0015]. As shown in the figures, reference numeral 7 is associated with an arrowed lead-line indicating the weight bearing elements, generally, and reference numeral 8 is associated with a lead line touching the wheel to indicate wheel 8 specifically. Accordingly, the use of reference numerals 7 and 8 is in compliance with 37 C.F.R. § 1.84(p)(4).

III. Drawing Objection Based on Reference Characters “25” and “26”

On page 2 of the Office Action, the Examiner has objected to the drawings as failing to comply with 37 C.F.R. § 1.84(p)(4) stating that reference characters “25” and “26” have been used to designate a plurality of different actuators which are claimed individually. As shown in the attached replacement drawings, the Applicants have amended the drawings to label the actuators of each section of the material handling apparatus with unique reference numerals instead of generally referring to “actuators 25” and “telescopic actuators 26.” The Applicants have also amended the specification, as appropriate, to reflect the new reference numerals.

IV. Drawing Objection Based On Claim 2

On page 3 of the Office Action, the Examiner has objected to the drawings under 37 C.F.R. § 1.83(a) stating that “they fail to show the device with a rotational member while the actuators are connected between the support surface and the riser as per claim 2.” The Applicants respectfully traverse this ground for objection.

Under 37 C.F.R. § 1.83(a) the “drawing in a nonprovisional application must show every feature of the invention specified in the claims.” Dependent claim 2 includes “a first hydraulic actuator coupled to the support structure and the riser” (element from claim 1), and “a rotation assembly coupled to the support structure and the riser portion.” These elements are shown in the exemplary embodiment of FIG. 2. As shown in FIG. 2, “rotation assembly 70” includes the “rotation bearing 72” that is coupled to “support structure 6” via the unlabeled pin and lug arrangement to the right of the lead line for reference numeral 72. Also as shown in FIG. 2, the left-most end of the unlabeled actuator 25 (see e.g., FIG. 3) is coupled to “support structure 6,” and the right most end of the unlabeled actuator 25 is connected to the generally cylindrical surface immediately to the left the lead line for numeral 72. Thus, FIG. 2 shows the unlabeled actuator 25 coupled to “riser portion 30” via the connection between the right most end of the unlabeled actuator 25 and the generally cylindrical surface immediately to the left the lead line for numeral 72. Accordingly, the Applicants respectfully assert that the drawings show “show every feature of the invention specified in” claim 2 as required by 37 C.F.R. § 1.83(a).

V. Drawing Objection Based on Claim 19

On page 3 of the Office Action, the Examiner has objected to the drawings under 37 C.F.R. § 1.83(a) stating that “the drawings fail to show the device with the minimum number of claimed wheels as per claim 19.” The Applicants respectfully traverse this ground for objection. Claim 19 recites “The land vehicle of claim 18, wherein the weight bearing element comprises at least one wheel.” Each of the drawings clearly show a vehicle having at least one wheel as recited in claim 19. Accordingly, the Applicants respectfully assert that the drawings show “show every feature of the invention specified in” claim 19 as required by 37 C.F.R. § 1.83(a).

VI. Drawing Objection Based On Claims 1, 6 and 12-14

On page 3 of the Office Action, the Examiner has objected to the drawings under 37 C.F.R. § 1.83(a) stating that “the drawings further do not shown the first second and third actuators on the outside of the device as claimed in claims 1, 6 and 12-14.” The Applicants respectfully traverse this ground for objection. Whether or not the drawings fail to show “the first second and third actuators on the outside of the device,” the Applicants respectfully assert that none of the claims 1, 6 and 12-14 recite such an element, and therefore, this ground for objection to the drawings is improper.

VII. Drawing Objection Based on “Control Apparatus”

On page 3 of the Office Action, the Examiner objects to the drawings under 37 C.F.R. § 1.83(a) stating that “the control apparatus is not shown other than mounted within the cab of the vehicle. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing.” The Applicants respectfully traverse this ground for objection. FIG. 1 discloses a “control apparatus 10,” and paragraph [0016] states that “control apparatus 10 can be mounted at convenient locations on the vehicle, for example in a cab of the vehicle or at an operator station located on the vehicle.” Thus, the drawings are in compliance with 37 C.F.R. § 1.83(a) because the “control apparatus” recited in claims 1 and 10 is shown in FIG. 1 and no further illustration in the drawings is essential for a proper understanding of the invention.

VIII. Drawing Objection Based on Lead Line Usage

On page 4 of the Office Action, the Examiner objected to the drawings stating that “the use of some types of leader lines is improper.” While the Examiner has not specified which lead lines resulted in this objection, the Applicants have reviewed the drawings to identify improper lead line usage. Based on this review, the Applicants have made amendments to the drawings to ensure proper lead line usage. In FIG. 1 numeral 26 and the associated lead line have been removed. In FIG. 3 the one instance of numeral 30 has been changed to numeral 33, the lead line for the second instance of numeral 30 has been changed to an arrowed lead line, and numeral 32 has been changed to numeral 31.

IX. Conclusion

Based on the drawing amendments and reasons discussed above, the Applicants respectfully assert that drawings are in compliance with 37 C.F.R. § 1.84(p)(4) and 37 C.F.R. § 1.83(a). Accordingly, the Applicants respectfully request withdrawal of the objections to the drawings.

Objection to Specification

On page 5 of the Office Action, the Examiner has objected to the specification for various reasons. As discussed below, the Applicants have addressed each of the objections identified by the Examiner. For the reasons discussed below, the Applicants respectfully request withdrawal of the objections to the specification.

I. Specification Objection Based on Reference Characters “25” and “26”

On page 5 of the Office Action, the Examiner objected to the specification based on the use of reference numerals 25 and 26 for “multiple individual members.” As discussed above, the drawings have been amended to label the actuators of each section of the material handling apparatus with unique reference numerals (23, 24, 27 and 28) instead of generally referring to “actuators 25” and “telescopic actuators 26.” The Applicants have amended the specification to recite new reference numerals 23, 24, 27 and 28 where appropriate to match the corresponding reference numeral amendments in the drawings.

II. Specification Objection Based on Reference Numerals 7 and 8

On page 5 of the Office Action, the Examiner objected to the specification stating that “elements 7 and 8 both refer to wheels.” The Applicants respectfully traverse this ground for objection. According to the Applicants’ specification, the figures “illustrates a weight bearing element 7 as being a wheel 8.” Paragraph [0015]. As shown in the figures, reference numeral 7 is associated with an arrowed lead-line indicating the weight bearing elements, generally, and reference numeral 8 is associated with a lead line touching the wheel to indicate wheel 8 specifically. Accordingly, the Applicants respectfully assert the use of reference numerals 7 and 8 in the specification is proper.

III. Specification Objection Based on the Use of “CS” in Paragraph

On page 5 of the Office Action, the Examiner stated that in “paragraph line 3 ‘CS’ should be deleted,” but the Examiner did not state the basis for requiring deletion. The Applicants believe the Examiner is referring to paragraph 26 which states “Figure 6 illustrates an exemplary embodiment of a material handling apparatus 20 mounted on a vehicle 5 and extending into a cargo space CS of an aircraft A.” Figure 6 shows an illustration of the “cargo space CS” and the “aircraft A.” Accordingly, the Applicants respectfully assert that the term “CS” in paragraph 26 is not a typographical error and is proper.

IV. Conclusion

Based on the specification amendments and reasons discussed above, the Applicants respectfully request withdrawal of the objections to the specification.

Claim Rejections – 35 U.S.C. § 112

I. Rejection of claims 2, 5, 10-19 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

On pages 5-6 of the Office Action, the Examiner rejected claims 2, 5, and 10-19 as failing to comply with the enablement requirement. For the reasons discussed below, the Applicants respectfully assert that claims 2, 5, 10-19 comply with the enablement requirement of 35 U.S.C. § 112, first paragraph.

Claim 2

Regarding claim 2, the Examiner states “there is no support for having the device of claim 1 rotate as the riser is connected to the supports via hydraulic actuators.”

Dependent claim 2 includes “a first hydraulic actuator coupled to the support structure and the riser” (element from claim 1), and “a rotation assembly coupled to the support structure and the riser portion.” The Applicants respectfully assert that both the drawings and the specification provide support for this claim language such that a person of skill in the art is enabled to make and use the invention recited in claim 2.

As shown in FIG. 2, “rotation assembly 70” includes the “rotation bearing 72” that is coupled to “support structure 6” via the unlabeled pin and lug arrangement to the right of the lead line for reference numeral 72. Also as shown in FIG. 2, the left-most end of the unlabeled actuator 25 (see, e.g., FIG. 3) is coupled to “support structure 6,” and the right most end of the unlabeled actuator 25 is connected to the generally cylindrical surface immediately to the left of the lead line for numeral 72. Thus, FIG. 2 shows the unlabeled actuator 25 coupled to “riser portion 30” via the connection between the right most end of the unlabeled actuator 25 and the generally cylindrical surface immediately to the left the lead line for numeral 72. The Applicants respectfully assert that based on the disclosure, including the portion discussed above, a person of skill in the art is enabled to make and use the invention of claim 2.

Claim 19

Regarding claim 19, the Examiner states “there is no support for the device being supported by a single wheel.” However, claim 19 recites “The land vehicle of claim 18, wherein the weight bearing element comprises at least one wheel” (emphasis added). Each of the drawings clearly show a vehicle having at least one wheel as recited in claim 19. Accordingly, the Applicants respectfully assert that a person of skill in the art is enabled to make and use the invention of claim 19.

Claims 5 and 10

Claim 5 recites “wherein the riser is movably coupled to the support structure for translation along the support structure.” Claim 10 recites “a telescopic riser coupled to the support structure for translation ... relative to the support structure.” In rejecting claims 5 and 10 for enablement, the Examiner states that, “there is no structure disclosed on the translation mechanism.” However, claims 5 and 10 are not directed toward a particular structure movably coupling the riser to the support structure for translation along the support structure. The Applicants respectfully assert that any number of coupling systems are known in the art that would allow for translation of the riser along the support structure (e.g., tracks, belts, chains, etc.).

Accordingly, the Applicants respectfully assert that the general disclosure of a “riser ... movably coupled to the support structure for translation along the support structure,” as recited in claim 5, and “a telescopic riser coupled to the support structure for translation ... relative to the support structure,” as recited in claim 10, is enabled without the disclosure of a particular structure that allows for the translation.

II. Rejection of claims 1-9 and 12-14 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-9 and 12-14

On page 6 of the Office Action, the Examiner rejected claims 1-9 and 12-14 under 35 U.S.C. § 112, second paragraph, as indefinite. The Examiner states “It is unclear how many actuators are used for pivoting the various parts amongst themselves. A single actuator is being claimed, but two are shown in all of the drawings. Further the actuators are not listed as first, second, third and fourth in the specification.”

The Applicants respectfully assert that independent claim 1 is clear regarding the number of actuators claimed. Independent claim 1 recites first, second and third telescopic actuators and first, second and third hydraulic actuators. Claim 1 recites six actuators and, thus, there is no uncertainty regarding the number of actuators recited in independent claim 1.

Further, regarding the Examiner's statement that "A single actuator is being claimed, but two are shown in all of the drawings," it is true that the figures show two articulating actuators (e.g., 25, 27, and 28) coupled between adjacent telescopic segments of the material handling apparatus 20. However, the Applicants assert that there is nothing unclear about a claim merely because the claimed invention is broader than an embodiment disclosed in the specification. According to M.P.E.P. § 2173.04 "Breadth of a claim is not to be equated with indefiniteness ... If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. § 112, second paragraph." The Applicants respectfully assert that independent claim 1 meets this standard, and thus is not indefinite.

For the same reasons discussed above regarding claim 1, the Applicants respectfully assert that claims 12-14, which depend from independent claim 10, are also not indefinite.

III. Rejection of claims 10-19 under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential elements.

On page 6 of the Office Action, the Examiner rejected claims 10-19 under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential elements. The Examiner stated "Regarding claims 10 and 11 the omitted elements are: actuators for providing the pivotal movement. The claims only have actuators for the telescopic movement."

While the Applicants do not agree with this rejection of claims 10-19, the Applicants have amended independent claim 10 to specifically recite at least one actuator in order to advance prosecution of the present application. Independent claim 10, as amended, includes “at least one actuator configured to cause movement of the riser, the boom and the jib in a telescopic mode and a pivoting mode.” Accordingly, the Applicants respectfully assert that claim 10 and claims 11-19, which depend from claim 10, are not incomplete for omitting an essential element.

Conclusion

The Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application, as amended, is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by the credit card payment instructions in EFS-Web being incorrect or absent, resulting in a rejected or incorrect credit card transaction, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

If any extensions of time are needed for timely acceptance of papers submitted herewith, the Applicants hereby petition for such extension under 37 C.F.R. § 1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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